

Sheridan County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/30/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 9 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Sheridan County economy.¹

These 9 sectors have a total direct output of approximately **\$296.1 million** and support **504.3 jobs** in Sheridan County. Running the model for all 9 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Sheridan County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	504.3	25.57%	\$67,775,306	43.05%	\$296,111,660	188.08%
Indirect Effect	214.8	10.89%	\$22,880,230	14.53%	\$36,530,850	23.20%
Induced Effect	80.5	4.08%	\$5,541,343	3.52%	\$10,265,281	6.52%
Total Effect	799.6	40.55%	\$96,196,878	61.10%	\$342,907,791	217.80%

As shown in the above table, agriculture, food, and food processing sectors support **799.6 jobs**, or **40.55%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$342.9 million**, roughly **217.80% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 9 agriculture, food, and food processing sectors is approximately **\$96.2 million**, or **61.10% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **61.10% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **393.7 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Sheridan County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	393.7	\$187,459,832
Grain farming	67.1	\$85,659,555
Wholesale trade	54.8	\$13,217,105
Support activities for agriculture and forestry	44.9	\$7,973,659
Real estate	27.1	\$1,958,696
Truck transportation	22.4	\$5,683,308
All other crop farming	21.9	\$5,865,871
Services to buildings	13.1	\$310,301
Maintenance and repair construction of nonresidential structures	11.8	\$1,361,289
Monetary authorities and depository credit intermediation	10.6	\$1,895,998

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$187.5 million** to the Sheridan County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	393.7	\$187,459,832
Grain farming	67.1	\$85,659,555
Wholesale trade	54.8	\$13,217,105
Oilseed farming	2.8	\$11,663,612
Support activities for agriculture and forestry	44.9	\$7,973,659
All other crop farming	21.9	\$5,865,871
Truck transportation	22.4	\$5,683,308
Owner-occupied dwellings	0.0	\$3,366,059
Animal production, except cattle and poultry and eggs	8.1	\$3,039,676
Real estate	27.1	\$1,958,696

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Sheridan County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	2.8	\$11,663,611.41
Grain farming	67.1	\$85,659,553.53
Vegetable and melon farming	0.2	\$70,543.95
All other crop farming	21.9	\$5,865,870.48
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	393.7	\$187,459,823.61
Poultry and egg production	1.1	\$1,530,717.97
Animal production, except cattle and poultry and eggs	8.1	\$3,039,675.47
Bread and bakery product, except frozen, manufacturing	0.8	\$87,475.88
Veterinary services	8.7	\$734,377.32

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Sheridan County, the retail sector was omitted.